

# Richland Operations Site Action Plan

Commitment 25, Feedback and Improvement

DNSFB Recommendation 2004-1

Approved, Keith Klein, Manager Richland Operations

NOTE: Change Control for this Site Action Plan resides with the Field Office Manager (or designee), with a cc: to EM-3.2.

## **Executive Summary**

#### **Evaluation Process**

This assessment was conducted as part of the U.S. Department of Energy, Richland Operations Office (RL) response to Commitment #25 of the Department of Energy's Implementation Plan (IP) for Defense Nuclear Facilities Safety Board (DNFSB) Recommendation 2004-1, "Oversight of Complex, High-Hazard Nuclear Operations". The assessment was performed in accordance with the Criteria and Review Approach Document (CRAD) at the 2004-1 Knowledge Portal and the supplemental lines of inquiry provided by EM staff via email on December 2, 2005. Washington Closure Hanford, LLC (WCH) was not evaluated at this time due to the recent contract transition and impending ISMS verification scheduled for FY 2006. WCH ISMS verification actions have been incorporated into this action plan.

Feedback and Improvement, specifically Fluor Hanford, Inc. (FIII) Corrective Action Management, has been a focus area of RL oversight for the past three years. RL performed a core surveillance of corrective action management each of the last three years and Core Surveillances are scheduled for Independent/Management Assessment and ISMS/Feedback and Improvement for FY 2006. In each case, a surveillance guide is developed and performed simultaneously at each FIII project to determine individual and sitewide issues. RL just completed a core surveillance on Independent/Management Assessment that was integrated into the single Feedback and Improvement assessment. The assessment resulted in the identification of nine opportunities for improvement in RL and FIII processes. This action plan contains the actions to address the programmatic opportunities for improvement and does not include the individual facility resolution of specific issues identified in each of the surveillance reports. Those items will be evaluated and resolved at the facility level through the corrective action management process.

#### **Overall Evaluation Summary**

The results of this assessment determined that RL and FHI have Feedback and Improvement mechanisms in place, however, DOE O. 226.1 and the proposed DOE O. 210.x are expected to further improve these processes. The objectives for three of the CRADs was identified as fully met with four objectives as partially met. Actions have been designed to address each of the opportunities for improvement as discussed in greater detail below.

| CRAD# | Objective Met | Objective Partially Met | Objective Not Met | Comments        |
|-------|---------------|-------------------------|-------------------|-----------------|
| 1     |               | X                       |                   | 3 OFIs noted    |
| 2.1   | X             |                         |                   | No issues noted |
| 2.2   |               | X                       |                   | 1 OFI noted     |
| 2.3   | X             |                         |                   | No issues noted |
| 2.4   | X             |                         |                   | 1 OFI noted     |
| 3     |               | X                       |                   | 3 OFIs noted    |
| Sup   |               | X                       |                   | 1 OFI noted     |

#### Summary of Results for F&I-1:

Program Documentation: Based upon the Feedback and Improvement assessment, RL and FHI have established the necessary operational assurance programs, however, the programs are not integrated in accordance with DOE O 226.1, requirements. RL is in the process of implementing DOE O 226.1 in site contracts, and these actions are incorporated into this action plan. In addition, WCH was not evaluated at this time due to the recent contract transition and impending ISMS verification scheduled for FY 2006. WCH ISMS verification actions have been incorporated into this action plan. Finally, a recently completed RL core surveillance in November 2005 on Independent and Management Assessment identified the need for improved self-critical evaluation to improve the effectiveness of the FHI management assessment program to identify and resolve latent organizational weaknesses. Thus, RL found that adequate program documentation was in place to support feedback and improvement with three opportunities for improvement.

#### Summary of Results for F&1-2.1:

Assessments and Performance Indicators: Based upon the F&l assessment above, RL and FHI have established adequate assessment and performance indicator processes, with some indications of continuous improvement evident. Thus, this objective and its criteria have been met with exceptional practices for RL (MOP and IEP) and FHI oversight (QDAWG) planning.

#### Summary of Results for F&1-2.2:

Operating Experience: Based upon the documented F&I assessment, RL and FIII have established operating experience processes for the requirements that are currently established. It is recognized that implementation of DOE O 210.x, when approved, will drive numerous changes to the operating experience process. Thus, this objective and its criteria have been met with actions to improve the process through implementation of DOE O. 210.x once it has been issued.

#### Summary of Results for F&I-2.3:

Event Reporting: Based upon the F&I assessment, RL and FHI have established adequate event reporting processes. ORPS is adequately implemented and has been supplemented by a CRD to provide additional RL requirements related to hazardous energy control and near miss events. Thus, this objective and its criteria have been met with no opportunities for improvement noted.

#### Summary of Results for F&I-2.4:

<u>Issues Management</u>: Based upon the F&I assessment and routine RL oversight, RL and FHI have established adequate issues management processes, with some minor opportunities for continuous improvement that have been documented and evaluated. Specifically, a recent RL self-assessment identified a need to strengthen RL processes to identify and respond to vulnerabilities and improvement opportunities. Thus, this objective and its criteria have been met with one opportunity for improvement.

#### Summary of Results for F&I-3:

RL Line Management Oversight: Based upon the F&I assessment, RL has established adequate line management oversight processes, with some minor opportunities for continuous improvement. The first opportunity for improvement is to establish mechanisms to effectively evaluate HQ and RL overlap and redundancy in oversight. The second opportunity is to clarify roles and responsibilities for QA oversight. This issue was identified during a recent EM assessment of the RL QA program. The final opportunity for improvement is to establish mechanisms to evaluate RL processes against others in the DOE complex or industry practices. The objective and its criteria have been partially met. One exceptional practice for routine documentation, communication, and trending of RL oversight using the Operational Awareness database, was identified.

#### Summary of Results for F&I-Sup:

Supplemental Criteria: Evaluation of RL and FHI processes against the supplemental criteria found that processes are in general compliant with the criteria; however, there are opportunities to improve causal analysis and the resulting corrective actions to consistently identify latent organizational weaknesses and take corrective actions that foster a work environment of error identification and resolution. Numerous indications are available that indicate error suppression tendencies and pockets that do not indicate a receptive, learning environment. To foster these attributes and improve overall safety culture, RL, FHI, and WCH are pursuing a joint strategic plan to integrate Human Performance Improvement into site management systems. General training has commenced with a systematic plan currently in development.

#### Conclusion:

In general, feedback and improvement across RL and FHI facilities is being performed adequately to support overall continuous improvement. Numerous opportunities to improve exist, including significant management system changes driven by the implementation of DOE O. 226.1 and DOE O. 210x. The single largest area of improvement will be realized through the effective implementation of Human Performance Improvement across RL, FHI, and WCH.

Section I contain those actions important to improving the effectiveness of the RL feedback and improvement.

Section II contains those actions necessary to verify Washington Closure Hanford ISMS, including feedback and improvement.

Section III contains those actions important to improving the effectiveness of FIII feedback and improvement.

Section IV contains RL feedback and improvement "Good Practices" for sharing across the DOE.

#### **SECTION I – DOE-RL**

#### Performance Objective F&I-1: Program Documentation

#### Opportunity for Improvement #1

DOE O. 226.1 was issued in September 2005 and requires implementation for RL contracts. RL has completed a record of decision, and actions are established to incorporate this order into the FIII and WCII contracts. A number of the criteria were not fully met within the feedback and improvement assessment since they were based upon DOE O. 226.1 that has not been fully implemented. RL has also included the action to revise the Feedback and Improvement CRAD to encompass the draft oversight manual CRAD for use in future RL core surveillances of this topic.

| DOE Action   | Deliverable  | Due Date       | Owner/Org            |
|--|--|----------------|----------------------|
| Incorporate CRD 226.1 into prime contracts.  | Copy of the contract modification for both FIII and WCH.                             | June 30, 2006  | Rob Hastings,<br>RL  |
| Incorporate DOE O. 226.1 into Richland Integrated Management System.                             | Copy of the changes to RIMS procedures that demonstrate DOE O. 226.1 implementation. | April 30, 2006 | Charlie Kasch,<br>RL |
| Incorporate draft Oversight Manual Feedback and Improvement CRAD into the RL Surveillance Guide. | Copy of the revised Feedback and Improvement Surveillance Guide.                     | March 15, 2006 | Rob Hastings,<br>RL  |

Responsible Manager: Assistant Manager for Safety and Engineering

Performance Objective F&I-2.1: Assessment and Performance Indicators

No opportunities for improvement noted at this time.

Performance Objective F&I-2.2: Operating Experience

Page 6 of 14 2004-1 WP&C Commitment 23

#### Opportunity for Improvement #1

RL has reviewed the draft DOE O 210.x and met with EH to provide initial comments to the draft directive. Once issued, RL will evaluate the directive per the established requirements management process and enhance the existing site process using the requirements of DOE O 210.x.

| DOE Action                                       | Deliverable                              | Due Date                                    | Owner/Org      |
|--|--|---|----------------|
| Perform Record of Decision against DOE O. 210.x. | Copy of the approved Record of Decision. | Four months following DOE 210.x approval.   | Al Hawkins, RL |
| Incorporate DOE O. 210.x into prime contracts.   | Copy of the contract modification.       | Twelve months following DOE 210.x approval. | 1              |

Responsible Manager: Office of Organizational Effectiveness and Communication

### Performance Objective F&I-2.3: Event Reporting

No opportunities for improvement noted at this time.

## Performance Objective F&I-2.4: Issues Management

#### Opportunity for Improvement #1

A recent EM QA assessment identified opportunities for improvement in the RL self-assessment process.

| DOE Action   | Deliverable  | Due Date           | Owner/Org      |
|--|--|--------------------|----------------|
| Train RL supervisors/managers on the expectations and requirements for self-assessments. | Copy of the training materials and course completion rosters.            | September 30, 2006 | Al Hawkins, RL |
| Establish requirements for RL self-assessment refresher training.                        | Copy of the RIMS procedure change to capture the refresher requirements. | September 30, 2006 | Al Hawkins, RL |

Responsible Manager: Office of Organizational Effectiveness and Communication

### Performance Objective F&I-3: DOE-RL Line Management Oversight

#### Opportunity for Improvement #1

Although RL incorporates HQ oversight schedules into the annual Integrated Evaluation Plan, no mechanisms are in place to routinely interface to minimize overlap.

| DOE Action  | Deliverable                         | Due Date     | Owner/Org        |
|---|-------------------------------------|--------------|------------------|
| Establish RIMS processes to periodically evaluate HQ and RL overlap of oversight. | Copy of the revised RIMS procedure. | May 30, 2006 | Rob Hastings, RL |

Responsible Manager: Assistant Manager of Safety and Engineering

#### Opportunity for Improvement #2

A recent EM assessment of RL and contractor QA implementation identified a weakness in staff understanding of responsibilities for QA oversight. RL is currently developing a corrective action plan to strengthen QA oversight roles and responsibilities for RL staff.

| DOE Action   | Deliverable  | Due Date     | Owner/Org         |
|--|--|--------------|-------------------|
| Clarify responsibilities for QA oversight in RIMS and communicate to RL staff. | Copy of the revised RIMS procedure and communication to staff. | July 1, 2006 | Charlie Kasch, RL |

Responsible Manager: Assistant Manager of Safety and Engineering

#### Opportunity for Improvement #3

Mechanisms are not currently in place to evaluate contractor assurance program descriptions across the DOE complex nor industry practices. During RL implementation of DOE O. 226.1, RIMS procedures will be revised to include consideration of DOE complex and industry practices.

| DOE Action | Deliverable  | Due Date     | Owner/Org         |
|------------|--|--------------|-------------------|
|            | Copy of the revised RIMS procedure and communication to staff. | May 30, 2006 | Charlie Kasch, RL |

Responsible Manager: Assistant Manager of Safety and Engineering

### Performance Objective F&I-Sup: Supplemental Criteria

#### Opportunity for Improvement #1

Prior to this feedback and improvement assessment, FHI identified an opportunity to improve project performance through training and adoption of Human Performance Improvement principles. This effort will involve a change in culture expected to span multiple years, however, RL and FHI will develop a strategy in accordance with the Human Performance Leadership Framework developed at a 2000 INPO industry working meeting in May 2000. The eight initiatives included the following: strategic plan, organizational structure, expectations, communication plan, reward and reinforcement plan, work processes and jobsite conditions, training and education, information system/sharing/learning. The actions below establish the foundation for RL, FHI, and WCH continuous improvement in this area.

| DOE Action  | Deliverable                                     | Due Date          | Owner/Org      |
|---|---|-------------------|----------------|
| Develop and approve a joint DOE-RL/FHI/WCH HPI strategic plan that addresses the eight initiatives of HPI leadership framework. | Copy of the Strategic Plan.                     | June 30, 2006     | Doug Shoop, RL |
| Train RL Facility Representatives and supervisors on Human Performance Improvement principles and techniques.                   | Course completion evidence in training records. | September 1, 2006 | Doug Shoop, RL |

Responsible Manager: Assistant Manager of Safety and Engineering

### SECTION II – Washington Closure Hanford (WCH)

#### Performance Objective F&I-1: Program Documentation

#### Opportunity for Improvement #1

WCII recently received the contract for RL River Corridor Closure workscope and is, therefore, in the process of developing an ISMS system description for all WCH workscope. Based upon this process, an opportunity for improvement has been identified to capture the need for ISMS verification of WCH in FY 2006.

| DOE Action                                  | Deliverable                        | Due Date           | Owner/Org      |
|---|------------------------------------|--------------------|----------------|
| Complete the WCH ISMS phase I verification. | Phase I ISMS verification report.  | May 30, 2006       | Doug Shoop, RL |
| Complete WCH ISMS Phase II verification.    | Phase II ISMS verification report. | September 30, 2006 | Doug Shoop, RL |

Responsible Manager: Assistant Manager for Safety and Engineering

#### Performance Objective F&I-2.1: Assessment and Performance Indicators

No opportunities for improvement noted at this time.

### Performance Objective F&I-2.2: Operating Experience

No opportunities for improvement noted at this time.

#### Performance Objective F&I-2.3: Event Reporting

No opportunities for improvement noted at this time.

#### Performance Objective F&1-2.4: Issues Management

No opportunities for improvement noted at this time.

#### Performance Objective F&I-Sup: Supplemental Criteria

No opportunities for improvement noted at this time.

### SECTION III – Fluor Hanford Inc. (FHI)

#### Performance Objective F&I-1: Program Documentation

#### Opportunity for Improvement #1

RL recently completed surveillances of FHI implementation of QA Management Assessment requirements identifying a need for increased self-critical evaluation to improve the effectiveness of the program and resolve latent organizational conditions. Over the last several years, FHI has implemented a number of actions to monitor management assessment quality and establish performance indicators. Some improvement has been observed, however, continued maturation and integration of Human Performance Improvement (HPI) techniques are warranted to achieve consistent, high quality error identification and resolution.

| FHI Action | Deliverable   | Due Date      | Owner/Org          |
|------------|---|---------------|--------------------|
| 1,         | Products (QDAWG Reports, MA, MA Mentor Package, etc.) that demonstrate improved effectiveness of Management Assessment process. | June 30, 2006 | Donna Busche, FIII |

Responsible Manager: Vice President of Regulatory Compliance, FHI

### Performance Objective F&I-2.1: Assessment and Performance Indicators

No opportunities for improvement noted at this time.

## Performance Objective F&1-2.2: Operating Experience

No opportunities for improvement noted at this time.

### Performance Objective F&1-2.3: Event Reporting

No opportunities for improvement noted at this time.

### Performance Objective F&1-2.4: Issues Management

No opportunities for improvement noted at this time.

### Performance Objective F&I-Sup: Supplemental Criteria

#### Opportunity for Improvement #1

Prior to this feedback and improvement assessment, FHI identified an opportunity to improve project performance through training and adoption of HPI principles. This effort will involve a change in culture expected to span multiple years, however, RL and FIII will develop a strategy in accordance with the Human Performance Leadership Framework developed at a 2000 INPO industry working meeting in May of 2000. The eight initiatives include the following; strategic plan, organizational structure, expectations,

communication plan, reward and reinforcement plan, work processes and job site conditions, training and education, information system/sharing/learning. The actions below establish the foundation for FHI continuous improvement in this area.

| FHI Action   | Deliverable | Due Date          | Owner/Org       |
|--|-------------|-------------------|-----------------|
| Train FIII line management and senior management on Human Performance Improvement principles and techniques. |             | September 1, 2006 | Tony Umek, FIII |

Responsible Manager: Vice President of Safety and Health, FIII

## **SECTION IV – DOE-RL F&I Good Practices**

| Good Practice(s)   | Site Point of Contact                |
|--|--------------------------------------|
| Good Practice #1: FHI has adopted a Quarterly Data Analysis Working Group (QDAWG) to evaluate performance data for trends and use of assessment, event reporting, or corrective action management tools to improve performance. This effort has allowed for early identification and resolution of precursor trend indications   | Bob Barmettlor, FIII: (509) 373-9501 |
| Good Practice #2: RL uses a Master Oversight Plan to quarterly identify project weaknesses or areas in need of oversight. This information is used to propose oversight areas which is then integrated between FRs, SMEs, SSOs, and project staff to maximize the utilization of RL oversight resources and the opportunity to influence project performance   | Rob Hastings, RL: (509) 376-9824     |
| Good Practice #3: RL uses a Core Surveillance process to evaluate multiple facilities simultaneously against a common surveillance guide/CRAD. The results of the oversight are evaluated for cross-cutting and programmatic issues that are then transmitted to the contractor for evaluation and action.   | Rob Hastings, RL: (509) 376-9824     |
| Good Practice #4: RL uses an access "Operational Awareness" database to provide real-time documentation and tracking of daily operational oversight results. This data is further utilized to communicate field information to RL senior management on a regular basis and directly supports trend analysis on a monthly and quarterly basis. Finally, this tool allows for prompt identification of issues to contractor staff so issues can be addressed at the lowest level necessary. The tool also provides data that is integrated with RL formal oversight documented in the form of surveillances and assessments. | Rob Hastings, RL: (509) 376-9824     |